IN THE CLAIMS:

A listing of the claims, in accordance with the revision of 37 C.F.R. § 1.121, is provided. The listing of claims replaces all prior listings of claims. Please amend claims 2-4 and 25 as shown below.

CLAIM LISTING

1. (Previously Amended) A combination, comprising:

a plurality of capture agents, wherein each capture agent specifically binds to a polypeptide; and

a plurality of oligonucleotides that each comprises a sequence of nucleotides that encodes a preselected polypeptide,

wherein:

the preselected polypeptides encoded by the oligonucleotides comprise the polypeptides to which the capture agents bind; and

the oligonucleotides are single-stranded, double-stranded or partially double-stranded.

2. (Currently Amended) The combination of claim 1, wherein the capture agents are antibodies[[, and the preselected polypeptides comprise epitopes to which the capture agents bind]].

3. (Currently Amended) The combination of claim 1, wherein the capture agents are arranged [[in]] as an addressable array.

4. (Currently Amended) The combination of claim 2, wherein the antibodies are arranged [[in]] as an addressable array.

5. (Originally Presented) The combination of claim 1, wherein the capture agents are linked directly or indirectly to a solid support.

6. (Originally Presented) The combination of claim 2, wherein the antibodies are linked directly or indirectly to a solid support.

7. (Originally Presented) The combination of claim 5, wherein the support is particulate.

8. (Originally Presented) The combination of claim [[3]] 5, wherein the capture agents comprise an array that is addressable.

9. (Originally Presented) The combination of claim [[2]]6, wherein the capture agents comprise an array that is addressable.

10. (Originally Presented) The combination of claim 7, wherein the particles are optically encoded.

11. (Originally Presented) The combination of claim 1, wherein each of the oligonucleotides comprises at least two regions, wherein the regions are a divider region that contains a sequence of nucleotides that comprise a sequence unique to a target library, and an epitope-encoding region that encodes a sequence of amino acids to which a capture agent in the collection binds.

12. (Originally Presented) The combination of claim 11, wherein the divider region is 3′ of the epitope-encoding region.

13. (Originally Presented) The combination of claim 11, wherein the divider and epitope regions comprise at least about 10 nucleotides.

14. (Originally Presented) The combination of claim 13, wherein the divider and epitope regions comprise at least about 15 nucleotides.

15. (Originally Presented) The combination of claim 13, wherein each of the oligonucleotides further comprises a common region, wherein the common region is shared by each of the oligonucleotides in the set, and is of a sufficient length to serve as a unique priming site for amplifying nucleic acid molecules that comprise the sequence of nucleotides that comprises the common region.

16. (Previously Amended) The combination of claim 15, wherein the common region is 3′ of the epitope-encoding region and/or of the divider region.

17. (Originally Presented) The combination of claim 1, wherein each oligonucleotide comprises a plurality of preselected polypeptides to which the capture agents bind.

18. (Originally Presented) The combination of claim X, wherein the plurality is three.

19. (Originally Presented) The combination of claim 1, wherein the capture agents are immobilized at discrete loci on a solid support, wherein the

capture agents at each loci specifically bind to one of the preselected polypeptides.

20. (Originally Presented)The combination of claim 19, wherein the capture agents are antibodies; and the preselected polypeptides comprise an epitope or plurality thereof to which the antibodies bind.

21. (Originally Presented) The combination of claim 1 that comprises from 3 up to 10^6 capture agents that specifically bind to different polypeptides.

22. (Originally Presented) The combination of claim 2 that comprises from 3 up to 10^6 antibodies that specifically bind to different epitopes.

23. (Originally Presented) The combination of claim 15, wherein the length of each of the divider, epitope and common regions is at least about 14 nucleotides.

24. (Originally Presented) The combination of claim 1, wherein the oligonucleotides comprise formula:

5′-E_m- 3′

wherein:

each E encodes a sequence of amino acids to which a capture agent binds, wherein each such sequence of amino acids is unique in the set;

m is, independently, an integer of 2 or higher.

25. (Currently Amended) The [[set of oligonucleotides]] <u>combination</u> of claim 24, wherein each oligonucleotide further comprises a common region C, and comprises formula:

5′ C-E_m 3′,

wherein the common region is shared by each of the oligonucleotides in the set, and is of a sufficient length to serve as a unique priming site for amplifying nucleic acid molecules that comprise the sequence of nucleotides that comprises the common region.

26. (Originally Presented) The combination of claim 1, wherein the oligonucleotides comprise formula:

5′-D_n-E_m- 3′

wherein:

each D is a unique sequence among the set of oligonucleotides and contains at least about 10 nucleotides;

each E encodes a sequence of amino acids to which a capture agent binds, wherein each such sequence of amino acids is unique in the set;

each of n and m is, independently, an integer of 2 or higher.

27. (Originally Presented) The combination of claim 16, wherein the capture agents are antibodies; and the unique sequence of amino acids comprises an epitope.

28. (Originally Presented) The combination of claim 27, wherein m is the number of antibodies with different epitope specificity in the combination and n is from about 2 up to and including 10^6.

29. (Originally Presented) The combination of claim 26, wherein m is the number of capture agents with different epitope specificity in the combination and n is from about 2 up to and including 10^6.

30. (Originally Presented) The combination of claim 28, wherein n is from about 2 to about 10^4, inclusive.

31. (Originally Presented) The combination of claim 29, wherein n is from about 2 to about 10^4, inclusive.

32. (Originally Presented) The combination of claim 29, wherein n is from about 2 to about 10^2, inclusive.

33. (Originally Presented) The combination of claim 2 that comprises up to about 10^3 antibodies.

34. (Originally Presented) The combination of claim 11, wherein the length of each of the divider and epitope regions is independently at least about 14 nucleotides.

35. (Originally Presented) The combination of claim 11, wherein the length of each of the divider and epitope regions is independently at least about 16 nucleotides.

36. (Originally Presented) The combination of claim 1, wherein the oligonucleotides are single-stranded primers.

37. (Originally Presented) The combination of claim 1, wherein the oligonucleotides are double-stranded.

Claims 38-48 previously cancelled.

49. (Originally Presented) A system for sorting collections of molecules, comprising:

a) a combination of claim 1; and

b) a computer system with software for analyzing results of sorts.

50. (Originally Presented) A system for sorting collections of molecules, comprising:

a) a combination of claim 2; and

b) a computer system with software for analyzing results of sorts.

51. (Originally Presented) The system of claim 49, further comprising a reader for detecting binding to capture agents in the collection.

52. (Originally Presented) The system of claim 51, wherein the reader comprises an imaging system.

53. (Originally Presented) The system of claim 50, wherein a computer system stores data and/or assesses data collected by the reader.

54. (Originally Presented) The system of claim 52, wherein the imaging system is a charge coupled device (CCD) or an array of photodiodes.

Claims 55-92 previously cancelled.

93. (Originally Presented) The combination of claim 1, that comprises from about 30 up to about 10^4 capture agents.

94. (Originally Presented) (Amended) The combination of claim 29, wherein n is from about 2 up to and including 10^5.

95. (Originally Presented) The combination of claim 29, wherein n is from about 2 to about 10^3, inclusive.

Claims 96-98 previously cancelled.

99. (Peviously presented) The combination of claim 26, wherein each oligonucleotide further comprises a common region C, and comprises formula:

5′ C-D_n-E_m 3′,

wherein the common region is shared by each of the oligonucleotides in the set, and is of a sufficient length to serve as a unique priming site for amplifying nucleic acid molecules that comprise the sequence of nucleotides that comprises the common region.